

National Aeronautics and Space Administration

September 16, 1996

NRA-96-MTPE-07

RESEARCH ANNOUNCEMENT

OPPORTUNITIES TO PARTICIPATE IN NASA'S MISSION TO PLANET EARTH EDUCATION PROGRAM

Letters of Intent Due October 15, 1996 (4:30 e.s.t.) Proposals Due November 18, 1996 (4:30 e.s.t.)

Opportunities to Participate in NASA's Mission To Planet Earth Education Program

NASA Research Announcement Soliciting Proposals for Period Ending November 18, 1996

NRA 96-MTPE-07 Issued September 16, 1996

Office of Mission to Planet Earth National Aeronautics and Space Administration Washington, DC 20546

OPPORTUNITIES TO PARTICIPATE IN NASA'S MISSION TO PLANET EARTH EDUCATION PROGRAM

I. Purpose of this announcement

The Mission to Planet Earth (MTPE) program is NASA's contribution to developing a vastly improved understanding of the Earth by capitalizing on the unique vantage point of space to provide information about the Earth's air, land, water and life - and the interactions among them. This approach to studying the Earth as an integrated system is referred to as Earth system science. The purpose of this announcement is to solicit unique and innovative proposals from a broad range of education and research professionals to develop and implement Earth system science education programs targeted for the pre-college, pre-service teaching community and higher education student population.

II. Background

NASA's Mission to Planet Earth is studying how our global environment is changing. Using the unique perspective available from space, NASA is observing, monitoring and assessing large-scale environmental processes, with an emphasis on climate change. MTPE satellite data, complemented by aircraft and ground data, are enabling us to better understand environmental changes, to determine how human activities have contributed to these changes and to understand the consequences of such changes. MTPE data, which NASA is distributing to researchers worldwide, are essential to humans making informed decisions about protecting their environment.

Over the past 15 years, scientists have begun to see the Earth as an intricately coupled system where the interactions of land, oceans, atmosphere, ice and biota are critical to understanding climate change on a regional-to-global scale. Thus, a new, interdisciplinary field of Earth system science has been created. The ultimate challenge of Earth system science is to develop the capability to predict those changes that will occur in the next decade to century, both naturally and in response to human activity.

This new field is maturing rapidly, driven by the basic nature of the questions and the importance of their implications for economic growth and the environment.

Mission to Planet Earth comprises an integrated slate of spacecraft and in situ measurement capabilities; data and information management systems to acquire, process, archive and distribute global data sets; and research and analysis programs to convert data into new knowledge of the Earth system. NASA's unique ability to develop advanced, spacebased research platforms, converging with the national interest in the basic sciences and their practical benefits, has led to the establishment of one of NASA's five strategic enterprises: the Mission to Planet Earth. Numerous users in academia, industry, and Federal, State, and Local governments tap the data sets generated by MTPE to produce products and services essential to achieving sustainable development.

The formal education community is a primary customer for MTPE's generated knowledge. While the goal of MTPE is scientific

understanding, the ultimate product of the program is education in its broadest form. Objective 2.2 of the MTPE program, as cited in the MTPE Strategic Enterprise Plan

http://www.hq.nasa.gov/office/mtpe/stratplan/stratplan.html is to
"foster the development of an informed and environmentally aware
public." Within this context, contributions by MTPE to the advancement
of formal education are a major aspect of how the success of the program
will be measured. Formal education and professional development provide
a structured opportunity to communicate the results and content of MTPE
to a significant community.

NASA's MTPE has worked with NASA's Education Division to develop a strategic formal education program with national impact, relevant science content, attention to equity and diversity and collaboration with external partners as basic principles. Two of the six primary objectives of the MTPE Education Strategy

http://www.hq.nasa.gov/office/mtpe/edstratplan/TableofContents.html are:
to train the next generation of scientists to use an interdisciplinary
Earth system science approach; and to continue to educate and train
educators as research evolves and capabilities change.

The current MTPE Education Program does not adequately address the above two objectives on a national basis, particularly for the undergraduate student population of emerging researchers and educators. This announcement seeks to round out the MTPE Education Program by strengthening these two aspects of the MTPE Education Strategy. (For more information on MTPE, please refer to the following Internet address: http://www.hq.nasa.gov/office/mtpe/ to access the MTPE home page.)

III. Description of proposals

This announcement solicits two different types of proposals. First, the Higher Education Student Support opportunity seeks to fund institutions that propose to provide enriching summer research experiences for primarily undergraduate students. Second, the Pre-Service Teacher Enhancement opportunity seeks to fund institutions that propose to provide workshops for students of education that provide exposure to Earth system science and training/access to available curriculum support materials.

III.a. Higher Education Student Support

NASA intends to make up to 5 awards at approximately \$75 thousand per year for up to three years (per award) to entities with unique and innovative proposals that provide summer research opportunities to primarily undergraduate students from a national base. The size of the grant is based on an estimate of approximately 12 student participants per institutional program year participating in a 4-6 week program. Student participants should meet university requirements for at least Junior level classification, with exception for community college participants. Student participants should come from a national base with no more than 25% registered at the host institution. Special attention should be given to diversity and equity in the student selection process. Diversity refers to an appropriate balance of gender, race and ethnicity. Equity, in this case, refers to a balance among participants' home institutions. The desired outcome is an opportunity provided to students from well-known and established

institutions as well as students from institutions that are underrepresented in the MTPE research program. Special consideration will be given to proposals that incorporate student participation goals of at least 50% from schools with limited research capability. The community college sector is often underrepresented in higher education student support research programs.

Students should be required to apply through a formal process and make a formal presentation at the conclusion of their experience. Additionally, student participants and mentors should be strongly encouraged to jointly produce a peer-reviewed publication. The area of research should fall into the Earth science field and its component disciplines (i.e. physics, math, chemistry, biology, engineering, computer science, etc.) with mandatory exposure to the various aspects of the Earth system. The student experience should include exposure to multiple mentors from different disciplines, including the education field (perhaps through a formal lecture series).

III.a.1 Proposal Preparation

Higher Education Student Support proposals should be prepared in accordance with the instructions in **Appendix A** of this announcement with the following augmentations. The completed proposal should not exceed 12 single-spaced pages, (including abstract, project description, figures, tables, references, management approach, personnel, facilities and equipment and proposed costs).

The proposal must also include signatures of all identified mentors, with attached, brief explanation of individual experience.

NASA strongly encourages organizations to contribute to the costs of this project. Of special interest is in-kind contribution of faculty time. Institutional support of equipment and materials for student participants and co-funding of student support would also be recognized as valuable cost-sharing.

III.b Pre-Service Teacher Enhancement

NASA intends to make 12-20 awards, not to exceed \$20K per award per year for up to three years duration to organizations that propose a unique and innovative way of providing emerging educators with a summer workshop opportunity to become familiar with Earth system science and receive introductory training on available curriculum support materials. The size of the grant assumes that the number of participants per workshop will not exceed 30 and that each workshop will be approximately 1 week in length. A further budget assumption is that no funding is assumed for participant transportation, lodging or time. If the proposing organization chooses to incorporate transportation, lodging or time for participants, this must be absorbed under the award amount or contributed by the proposing organization as cost sharing. Participants should primarily be at the undergraduate level in at least their Junior year of an accredited teacher preparation program or participating in an accredited alternative certification program. It is desirable for the workshop to include up to 25% participation from local in-service educators. The interaction between the in-service and pre-service educators should enrich the program and provide the students with contacts in the field.

Cooperation between the proposing organization and the State Education Agency and/or Local Education Agencies is critical to ensure successful program results.

One of the major objectives of this project is to expose the participants to the Earth system science holistic approach and recent scientific results. Therefore, partnerships between science and education faculty from the same institution or a neighboring institution is essential to provide a balance of scientific and educational expertise.

The second major objective is to provide hands-on training with Earth system science-related products. Materials will be distributed at the workshops. At least one classroom copy of each selected product should be provided to each participant. An adequate amount of time should be devoted to familiarizing participants with the NASA curriculum support materials and how they are disseminated through the Teacher Resource Center Network, Spacelink, and NASA's Central Operation of Resources for Educators (CORE). NASA's MTPE maintains an evaluated inventory of various curriculum support products. On a request basis, awardees will be provided with in-stock, printed materials for their workshops freeof-charge. Multi-media products may be purchased at cost through CORE. It is not necessary that all materials be produced by NASA. If the proposing organization chooses to use and distribute other Earth system science-related materials, they should feel free to augment and enrich their sessions as desired. For more information on NASA/MTPE curriculum support materials and the dissemination strategy, please refer to the MTPE Education Strategy

http://www.hq.nasa.gov/office/mtpe/edstratplan/TableofContents.html and
the MTPE Education Catalog, referenced as
Education.Programs.and.Resource.1995.pdf on

http://spacelink.msfc.nasa.gov/Educational.Services/Mission.to.Planet.Earth/

III.b.1 Proposal Preparation

Pre-Service Teacher Enhancement proposals should be prepared in accordance with the instructions in **Appendix A** of this announcement with the following augmentations. The completed proposal should not exceed 12 single-spaced pages (including abstract, project description, figures, tables, references, management approach, personnel, facilities and equipment and proposed costs).

The proposal must also include assurance that 1 university credit for pre-service participation and 1 CEU (Continuing Education credit) be approved by the State Department of Education for in-service participation.

NASA strongly encourages organizations to contribute to the costs of this project. Of special interest is in-kind contribution of faculty time. Institutional support of equipment and materials for conduct of the workshop as well as materials for the student participants would also be recognized as valuable cost-sharing.

IV. Progress Evaluation

A major component of the MTPE Education Strategy is evaluation of all materials, projects and programs. Project evaluation data and accomplishments of approved NASA/MTPE Education grants selected through this announcement will be monitored by the MTPE Education Program Office located at the Goddard Space Flight Center (Code 170). All selected investigators will be required to submit annual progress reports describing the current status of the project. The format for annual progress reports will be determined by the MTPE Education Program Office, but will not exceed five pages in length and will require primarily metrics with very little narrative explanation. Additionally, each investigator will be required to submit a more detailed final report at the end of the investigation period, which will have a larger narrative component.

V. Eligibility

Participation in this announcement is open to all categories of domestic and foreign organizations (see Appendix B for guidance on foreign participation), educational institutions, industry, nonprofit institutions, NASA centers, museums, observatories, as well as private sector entities.

In addition, eligibility for the Pre-Service Teacher Enhancement opportunity requires the institution to offer an accredited teacher certification program or partner with an institution that does possess that criteria.

Federal mandates require NASA to strengthen the capacity of Historically Black Colleges and Universities (HBCU) to provide quality education and to participate in and benefit from Federal programs and the expand educational opportunities for Hispanic Americans. Therefore, institutions of higher education designated as HBCU's or Hispanic-Serving Institutions are strongly encouraged to respond to this announcement.

VI. Evaluation Criteria

Strategic, U.S. national impact is a critical success factor for the MTPE Education Program. Higher Education Student Support awards will be made to a set of organizations that, as a whole, present the best opportunity to maximize U.S. nationwide opportunities for student participants, while maintaining a projected balance of equity and diversity. The Pre-Service Teacher Enhancement awards will be made to a set of organizations that maximizes the potential national impact on the Pre-Service education community. Therefore, U.S. geographic distribution is a critical selection factor.

The general criteria for proposal selection (see Appendix A) apply to this announcement with the following augmentation:

Cost-sharing and effective partnerships to leverage funds available will be taken as a significant positive factor in the decision-making process.

VII. Proposal Submission and Selection Schedule

All prospective proposers are strongly encouraged to submit a letter of intent in response to this announcement. This will allow us to alert a

peer review staff to adequately cover the proposal review process. This letter of intent is available electronically via the Internet at URL: http://www.mtpe.hq.nasa.gov/LOI/form.html The URL for the Co-Investigator information is: http://www.mtpe.hq.nasa.gov/LOI/coi.html We urge you to use these electronic letter of intent forms unless you do not have access to the Internet. In that case, we will accept a FAX copy sent to 202-554-3024 with the following information:

- PI and CoI names and addresses, (including Zip + 4);
- Title of proposal;
- Telephone number;
- Fax number;
- Email address; and
- A brief summary of what you plan to propose (Please limit this to no more than 3000 characters).

Letter of intent to propose due 4:30pm e.d.t., on October 15, 1996

Proposals due to NASA 4:30 p.m. e.d.t., on November 18, 1996

Announcement of final selections late January 1997

Additional information is provided in Appendices A, B and C of this ${\tt Announcement}.$

Identifier: NRA-96-MTPE-07

Submit Letters of Intent

and Proposals to: MTPE Education Announcement

Code Y

400 Virginia Avenue, SW, Suite 700

Washington, DC 20024

For overnight mail delivery purposes only

the recipient telephone number is

(202) 554-2775.

Copies required: 10

Selecting Official: Director, Management Integration Division

Office of Mission To Planet Earth

Obtain Additional

General Information: Ms. Lisa Ostendorf

NASA Headquarters

Code YM

Washington, DC 20546

(202)358-0792

E-mail: lisa.ostendorf@hq.nasa.gov

Your interest and cooperation in participating in this opportunity are appreciated.

ORIGINAL SIGNED BY

William F. Townsend Acting Associate Administrator for Mission To Planet Earth

Enclosures:

Appendix A, "Instructions for Responding to NASA Research Announcements"

Appendix B, "Guidelines for Foreign Participation"

Appendix C, "Required Declarations and proposal Cover Sheet"

APPENDIX A INSTRUCTIONS FOR RESPONDING TO NASA RESEARCH ANNOUNCEMENTS (JUNE 1995)

1. Foreword

- a. These instructions apply to NASA Research Announcements. The "NASA Research Announcement (NRA)" permits competitive selection of research projects in accordance with statute while preserving the traditional concepts and understandings associated with NASA sponsorship of research.
- b. These instructions are Appendix I to 1870.203 of the NASA Federal Acquisition Regulation Supplement.

2. Policy

- a. Proposals received in response to an NRA will be used only for evaluation purposes. NASA does not allow a proposal, the contents of which are not available without restriction from another source, or any unique ideas submitted in response to an NRA to be used as the basis of a solicitation or in negotiation with other organizations, nor is a pre-award synopsis published for individual proposals.
- b. A solicited proposal that results in a NASA award becomes part of the record of that transaction and may be available to the public on specific request; however, information or material that NASA and the awardee mutually agree to be of a privileged nature will be held in confidence to the extent permitted by law, including the Freedom of Information Act.

3. Purpose

These instructions supplement documents identified as "NASA Research Announcements." The NRAs contain programmatic information and certain requirements which apply only to proposals prepared in response to that particular announcement. These instructions contain the general proposal preparation information which applies to responses to all NRAs.

4. Relationship to Award

- a. A contract, grant, cooperative agreement, or other agreement may be used to accomplish an effort funded in response to an NRA. NASA will determine the appropriate instrument.
- b. Grants are generally used to fund basic research in educational and nonprofit institutions, while research in other private sector organizations is accomplished under contract. Contracts resulting from NRAs are subject to the Federal Acquisition Regulation and the NASA FAR Supplement (NHB 5100.4). Any resultant grants or cooperative agreements will be awarded and administered in accordance with the NASA Grant and Cooperative Agreement Handbook (NHB 5800.1).

5. Conformance to Guidance

- a. NASA does not have mandatory forms or formats for preparation of responses to NRAs; however, it is requested that proposals conform to the guidelines in these instructions. NASA may accept proposals without discussion; hence, proposals should initially be as complete as possible and be submitted on the proposers' most favorable terms.
- b. In order to be considered responsive, a submission must, at a minimum, present a specific project within the areas delineated by the NRA; contain sufficient technical and cost information to permit a meaningful evaluation; be signed by an official authorized to legally bind the submitting organization; not merely offer to perform standard services or to just provide computer facilities or services; and not significantly duplicate a more specific current or pending NASA solicitation.

6. NRA-Specific Items

a. Several proposal submission items appear in the NRA itself. These include: the unique NRA identifier; when to submit proposals; where to send proposals; number of copies required; and sources for more information. Items included in these instructions may be supplemented by the NRA.

7. Proposal Contents

- a. The following information is needed in all proposals in order to permit consideration in an objective manner. NRAs will generally specify topics for which additional information or greater detail is desirable. Each proposal copy shall contain all submitted material, including a copy of the transmittal letter if it contains substantive information.
- b. **Transmittal Letter or Prefatory Material.** (1) The legal name and address of the organization and specific division or campus identification if part of a larger organization;
- (2) A brief, scientifically valid project title intelligible to a scientifically literate reader and suitable for use in the public press;
- (3) Type of organization: e.g., profit, nonprofit, educational, small business, minority, women-owned, etc.;
- (4) Name and telephone number of the principal investigator and business personnel who may be contacted during evaluation or negotiation;
- (5) Identification of other organizations that are currently evaluating a proposal for the same efforts;
- (6) Identification of the NRA, by number and title, to which the proposal is responding;
 - (7) Dollar amount requested, desired starting date, and duration of project;
 - (8) Date of submission; and
- (9) Signature of a responsible official or authorized representative of the organization, or any other person authorized to legally bind the organization (unless the signature appears on the proposal itself).

c. Restriction on Use and Disclosure of Proposal Information

Information contained in proposals is used for evaluation purposes only. Offerors or quoters should, in order to maximize protection of trade secrets or other information that

is confidential or privileged, place the following notice on the title page of the proposal and specify the information subject to the notice by inserting appropriate identification, such as page numbers, in the notice. In any event, information contained in proposals will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

NOTICE

Restriction on Use and Disclosure of Proposal Information. The information (data) contained in [insert page numbers or other identification] of this proposal constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed other than for evaluation purposes; provided, however, that in the event a contract (or other agreement) is awarded on the basis of this proposal the Government shall have the right to use and disclose this information (data) to the extent provided in the contract (or other agreement). This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

- d. **Abstract.** Include a concise (200-300 word if not otherwise specified in the NRA) abstract describing the objective and the method of approach.
- e. **Project Description**. (1) The main body of the proposal shall be a detailed statement of the work to be undertaken and should include objectives and expected significance; relation to the present state of knowledge; and relation to previous work done on the project and to related work in progress elsewhere. The statement should outline the plan of work, including the broad design of experiments to be undertaken and a description of experimental methods and procedures. The project description should address the evaluation factors in these instructions and any specific factors in the NRA. Any substantial collaboration with individuals not referred to in the budget or use of consultants should be described. Subcontracting significant portions of a research project is discouraged.
- (2) When it is expected that the effort will require more than one year for completion, the proposal should cover the complete project to the extent that it can be reasonably anticipated. Principal emphasis should, of course, be on the first year of work, and the description should distinguish clearly between the first year's work and work planned for subsequent years.
- f. **Management Approach**. For large or complex efforts involving interactions among numerous individuals or other organizations, plans for distribution of responsibilities and arrangements for ensuring a coordinated effort should be described. Intensive working relations with NASA field centers that are not logical inclusions elsewhere in the proposal should be described.
- g. **Personnel**. The principal investigator is responsible for supervision of the work and participates in the conduct of the research regardless of whether or not compensated under the award. A short biographical sketch of the principal investigator, a list of principal publications and any exceptional qualifications should be included. Omit social security number and other personal items which do not merit consideration in evaluation of the proposal. Give similar biographical information on other senior professional personnel who will be directly associated with the project. Give the names and titles of any other scientists and technical personnel associated substantially with the

project in an advisory capacity. Universities should list the approximate number of students or other assistants, together with information as to their level of academic attainment. Any special industry- university cooperative arrangements should be described.

- h. **Facilities and Equipment**. (1) Describe available facilities and major items of equipment especially adapted or suited to the proposed project, and any additional major equipment that will be required. Identify any Government-owned facilities, industrial plant equipment, or special tooling that are proposed for use.
- (2) Before requesting a major item of capital equipment, the proposer should determine if sharing or loan of equipment already within the organization is a feasible alternative. Where such arrangements cannot be made, the proposal should so state. The need for items that typically can be used for research and non-research purposes should be explained.
- i. **Proposed Costs**. (1) Proposals should contain cost and technical parts in one volume: do not use separate "confidential" salary pages. As applicable, include separate cost estimates for salaries and wages; fringe benefits; equipment; expendable materials and supplies; services; domestic and foreign travel; ADP expenses; publication or page charges; consultants; subcontracts; other miscellaneous identifiable direct costs; and indirect costs. List salaries and wages in appropriate organizational categories (e.g., principal investigator, other scientific and engineering professionals, graduate students, research assistants, and technicians and other non-professional personnel). Estimate all manpower data in terms of man-months or fractions of full-time.
- (2) Explanatory notes should accompany the cost proposal to provide identification and estimated cost of major capital equipment items to be acquired; purpose and estimated number and lengths of trips planned; basis for indirect cost computation (including date of most recent negotiation and cognizant agency); and clarification of other items in the cost proposal that are not self- evident. List estimated expenses as yearly requirements by major work phases. (Standard Form 1411 may be used).
- (3) Allowable costs are governed by FAR Part 31 and the NASA FAR Supplement Part 18-31 (and OMB Circulars A-21 for educational institutions and A-122 for nonprofit organizations).
- j. **Security**. Proposals should not contain security classified material. If the research requires access to or may generate security classified information, the submitter will be required to comply with Government security regulations.
- k. **Current Support**. For other current projects being conducted by the principal investigator, provide title of project, sponsoring agency, and ending date.
- l. **Special Matters**. (1) Include any required statements of environmental impact of the research, human subject or animal care provisions, conflict of interest, or on such other topics as may be required by the nature of the effort and current statutes, executive orders, or other current Government-wide guidelines.
- (2) Proposers should include a brief description of the organization, its facilities, and previous work experience in the field of the proposal. Identify the cognizant Government audit agency, inspection agency, and administrative contracting officer, when applicable.

8. Renewal Proposals

a. Renewal proposals for existing awards will be considered in the same manner as proposals for new endeavors. A renewal proposal should not repeat all of the

information that was in the original proposal. The renewal proposal should refer to its predecessor, update the parts that are no longer current, and indicate what elements of the research are expected to be covered during the period for which support is desired. A description of any significant findings since the most recent progress report should be included. The renewal proposal should treat, in reasonable detail, the plans for the next period, contain a cost estimate, and otherwise adhere to these instructions.

b. NASA may renew an effort either through amendment of an existing contract or by a new award.

9. Length

Unless otherwise specified in the NRA, effort should be made to keep proposals as brief as possible, concentrating on substantive material. Few proposals need exceed 15-20 pages. Necessary detailed information, such as reprints, should be included as attachments. A complete set of attachments is necessary for each copy of the proposal. As proposals are not returned, avoid use of "one-of-a-kind" attachments: their availability may be mentioned in the proposal.

10. Joint Proposals

- a. Where multiple organizations are involved, the proposal may be submitted by only one of them. It should clearly describe the role to be played by the other organizations and indicate the legal and managerial arrangements contemplated. In other instances, simultaneous submission of related proposals from each organization might be appropriate, in which case parallel awards would be made.
- b. Where a project of a cooperative nature with NASA is contemplated, describe the contributions expected from any participating NASA investigator and agency facilities or equipment which may be required. The proposal must be confined only to that which the proposing organization can commit itself. "Joint" proposals which specify the internal arrangements NASA will actually make are not acceptable as a means of establishing an agency commitment.

11. Late Proposals

A proposal or modification received after the date or dates specified in an NRA may be considered if the selecting official deems it to offer NASA a significant technical advantage or cost reduction.

12. Withdrawal

Proposals may be withdrawn by the proposer at any time. Offerors are requested to notify NASA if the proposal is funded by another organization or of other changed circumstances which dictate termination of evaluation.

13. Evaluation Factors

a. Unless otherwise specified in the NRA, the principal elements (of approximately equal weight) considered in evaluating a proposal are its relevance to NASA's objectives, intrinsic merit, and cost.

- b. Evaluation of a proposal's relevance to NASA's objectives includes the consideration of the potential contribution of the effort to NASA's mission.
- c. Evaluation of its intrinsic merit includes the consideration of the following factors, none of which is more important than any other:
- (1) Overall scientific or technical merit of the proposal or unique and innovative methods, approaches, or concepts demonstrated by the proposal.
- (2) Offeror's capabilities, related experience, facilities, techniques, or unique combinations of these which are integral factors for achieving the proposal objectives.
- (3) The qualifications, capabilities, and experience of the proposed principal investigator, team leader, or key personnel critical in achieving the proposal objectives.
- (4) Overall standing among similar proposals and/or evaluation against the state-of-the-art.
- d. Evaluation of the cost of a proposed effort includes the realism and reasonableness of the proposed cost and the relationship of the proposed cost and available funds.

14. Evaluation Techniques

Selection decisions will be made following peer and/or scientific review of the proposals. Several evaluation techniques are regularly used within NASA. In all cases proposals are subject to scientific review by discipline specialists in the area of the proposal. Some proposals are reviewed entirely in-house, others are evaluated by a combination of in-house and selected external reviewers, while yet others are subject to the full external peer review technique (with due regard for conflict-of- interest and protection of proposal information), such as by mail or through assembled panels. The final decisions are made by a NASA selecting official. A proposal which is scientifically and programmatically meritorious, but not selected for award during its initial review, may be included in subsequent reviews unless the proposer requests otherwise.

15. Selection for Award

- a. When a proposal is not selected for award, and the proposer has indicated that the proposal is not to be held over for subsequent reviews, the proposer will be notified. NASA will explain generally why the proposal was not selected. Proposers desiring additional information may contact the selecting official who will arrange a debriefing.
- b. When a proposal is selected for award, negotiation and award will be handled by the procurement office in the funding installation. The proposal is used as the basis for negotiation. The contracting officer may request certain business data and may forward a model contract and other information which will be of use during the contract negotiation.

16. Cancellation of NRA

NASA reserves the right to make no awards under this NRA and to cancel this NRA. NASA assumes no liability for canceling the NRA or for anyone's failure to receive actual notice of cancellation. Cancellation may be followed by issuance and synopsis of a revised NRA, since amendment of an NRA is normally not permitted.

APPENDIX B

GUIDELINES FOR FOREIGN PARTICIPATION

NASA accepts proposals from entities located outside the U.S. in response to this NRA. Proposals from non-U.S. entities should not include a cost plan. Non-U.S. proposals, and U.S. Proposals that include non-U.S. participation, must be endorsed by the respective government agency or funding/sponsoring institution in the country from which the non-U.S. participant is proposing. Such endorsement should indicate the following points: (1) The proposal merits careful consideration by NASA; and (2) If the proposal is selected, sufficient funds will be made available by the sponsoring foreign agency to undertake the activity as proposed.

Proposals, along with the requested number of copies and Letter of Endorsement must be forwarded to NASA in time to arrive before the deadline established for this NRA. In addition, one copy of each of these documents should be sent to:

NASA Headquarters Office of External Relations Mission to Planet Earth Division Mail Code IY Washington, DC 20546 USA

Any materials sent by courier or express mail (e.g., Federal Express) should be sent to:

NASA Headquarters Office of External Relations Mission to Planet Earth Division Mail Code IY 300 E Street, SW Washington, DC 20024-3210

All proposals must be typewritten in English. All non-U.S. proposals will undergo the same evaluation and selection process as those originating in the U.S. Non-U.S. proposals and U.S. Proposals that include non-U.S. participation, must follow all other guidelines and requirements described in this NRA. Sponsoring non-U.S. agencies may, in exceptional situations, forward a proposal without endorsement to the above address, if review and endorsement are not possible before the announced closing date. In such cases, however, NASA's Mission To Planet Earth Division of the Office of External Relations should be advised when a decision on the endorsement is to be expected.

Successful and unsuccessful proposers will be contacted directly by the NASA Program Office coordinating the NRA. Copies of these letters will be sent to the sponsoring government agency.

Appendix C

Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211). Copies of the regulation may be obtained by contracting the U.S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, S.W. (Room 3633 GSA Regional Office Building No. 3), Washington, DC. 20202-4725, telephone (202) 732-2505.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statues or commission of embezzlement theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name	PR/Award Number or Project Name		
Name and Title of Authorized Rep	resentative		
Signature	Date		

ED Form GCS-008 (REV.12/88)

Appendix C

Certification Regarding Drug-Free Workplace Requirements Grantees Other Than Individuals

This certification is required by the regulations implementing the Drug-Free Workplace Act of 1988, 34 CFR Part 85, Subpart F. The regulations, published in the January 31, 1989 Federal Register, require certification by grantees, prior to award, that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the agency determines to award the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or governmentwide suspension or debarment (see 34 CFR Part 85, Sections 85.615 and 85.620).

This grantee certifies that it will provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about -
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs, and
 - (4) The penalties that may be imposed upon employees for drug abuse violations in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will -
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than
 - five days after such conviction;
- (e) Notifying the agency within ten days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction;
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted -
 - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraph (a), (b), (c), (e), and (f).

Organization Name	PR/Award Number or Project Name		
Name and Title of Authorized Representative			
Signature	Date		

ED 80-0004

Appendix C

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000 for each such failure.

Signature and Date		
Name and Title of Authorized Representative	 	
Organization Name		

Proposal Cover Sheet NASA Research Announcement 96-MTPE-07

Proposal No		(Leave Blank	ior NASA Use)		
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